TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104 Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION

WIN-1802 Reevaluation Date: **December 2015**

Effective Date: October 1, 2013

The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code** (IRC) and the **International Building Code** (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Series 143.000 Vinyl Fixed Windows, New Construction and Replacement, Impact Resistant, manufactured by

Showcase Custom Vinyl Windows and Doors A product of ENLIGHT Industries, LLC 1702 Cullen Blvd. Houston, Texas 77023 Telephone: (713) 926-8500

General Description:

System	Description	Label Rating	Design Pressure Rating (psf)
1	Series 143.000 Vinyl Impact Fixed Windows	FW-C80 50x63; Missile Level D	± 55
2	Series 143.000 Vinyl Impact Fixed Windows	FW-C80 64x84; Missile Level D	± 50

Component Dimensions:

System	Overall Window Wall Size	Fixed Lite Daylight Opening Size
1	50" x 63"	45" x 58"
2	64" x 84"	59" x 79"

Product Identification: Two certification program labels (Keystone) will be affixed to the windows. The certification program labels include the manufacturer's CAR number; product name; performance characteristics; and the approved inspection agency (Keystone). One label includes the following applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05. The second label includes the following applicable standards: ASTM E 1886-05 and ASTM E 1996-06. The manufacturer is also permitted to have one Keystone label indicating both approvals.

Each certification label contains a Certification Authorization Report (CAR) number located on the top right side of the label and a model name for the window. The following CAR numbers and model names are located on each label:

Label Identification:

			Certification Authorization Report (CAR) number
System	Model	Label with AAMA/WDMA/CSA 101/I.S.2/A440-05	Label with ASTM E 1886-05 / ASTM E 1996-05
1	Series 143.000 Vinyl Impact Fixed Windows	839-1041	839-215 Missile Level D
2	Series 143.000 Vinyl Impact Fixed Windows	839-1040	839-214 Missile Level D

Impact Resistance:

System	Impact Resistant	Requirement
1&2	Yes	These products satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the Inland I and Seaward zone . The assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded.

Installation:

System		
	Type of Installation	New Construction – Nailing Fin
	Wall Framing	Spruce-Pine-Fir
	Fasteners	Minimum No. 8 Screws
	Fastener Location/Spacing	Frame Head and Sill: From the left jamb to the right, a fastener shall be located at 6", 20", 30" and 44". Frame Jambs: From the frame head to the sill, a fastener shall be located at 6", 20", 32", 44" and 57".
1	Fastener Penetration	Minimum of 1 $\frac{1}{2}$ inches into the wall framing members
'	Type of Installation	Replacement – Through Jambs
	Wall Framing	Spruce-Pine-Fir
	Fasteners	Minimum No. 8 Screws
	Fastener Location/Spacing	Frame Head and Sill: From the left jamb to the right, a fastener shall be located at 6", 20", 30" and 44". Frame Jambs: From the frame head to the sill, a fastener shall be located at 6", 20", 32", 44" and 57".
	Fastener Penetration	Minimum of 1 $\frac{1}{2}$ inches into the wall framing members

Installation 9Continued):

System	-	
	Type of Installation	New Construction – Nailing Fin
	Wall Framing	Spruce-Pine-Fir
	Fasteners	Minimum No. 8 Screws
	Fastener Location/Spacing	Frame Head and Sill: From the left jamb to the right, a fastener shall be located at 6", 14", 22", 34", 40" and 58". Frame Jambs: From the frame head to the sill, a fastener shall be located at 6", 18", 30", 42", 54", 66" and 57".
2	Fastener Penetration	Minimum of 1 $\frac{1}{2}$ inches into the wall framing members
2	Type of Installation	Replacement – Through Jambs
	Wall Framing	Spruce-Pine-Fir
	Fasteners	Minimum No. 8 Screws
	Fastener Location/Spacing	Frame Head and Sill: From the left jamb to the right, a fastener shall be located at 6", 14", 22", 34", 40" and 58". Frame Jambs: From the frame head to the sill, a fastener shall be located at 6", 18", 30", 42", 54", 66" and 57".
	Fastener Penetration	Minimum of 1 $\frac{1}{2}$ inches into the wall framing members

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.